

? LCM

LCM[n_1, n_2, \dots] gives the least common multiple of the n_i . >>

n = 35;

(LCM@@Range[n]) / Range[n]

```
{144 403 552 893 600, 72 201 776 446 800, 48 134 517 631 200, 36 100 888 223 400,
 28 880 710 578 720, 24 067 258 815 600, 20 629 078 984 800, 18 050 444 111 700,
 16 044 839 210 400, 14 440 355 289 360, 13 127 595 717 600, 12 033 629 407 800,
 11 107 965 607 200, 10 314 539 492 400, 9 626 903 526 240, 9 025 222 055 850,
 8 494 326 640 800, 8 022 419 605 200, 7 600 186 994 400, 7 220 177 644 680, 6 876 359 661 600,
 6 563 797 858 800, 6 278 415 343 200, 6 016 814 703 900, 5 776 142 115 744, 5 553 982 803 600,
 5 348 279 736 800, 5 157 269 746 200, 4 979 432 858 400, 4 813 451 763 120, 4 658 179 125 600,
 4 512 611 027 925, 4 375 865 239 200, 4 247 163 320 400, 4 125 815 796 960}
```

Range[n]

```
{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35}
```

LCM@@Range[65]

```
1 182 266 884 102 822 267 511 361 600
```